Amendments to the Specification:

Please replace the paragraph at page 96, line 24 to page 97, line 2 with the following amended paragraph:

PCR/LCR products can be detected in solution, eliminating the need for separation or sequencing (although these approaches can be used, if desired, to provide more complete information of what sequences are rescued). For example, the amount of double-strnaded DNA in the rescued pool provides an indication as to whether a PCR/LCR was successful. Thus, ~~If~~ if there is double-stranded DNA following a rescue PCR/LCR amplification on a subset of the pool, then it is likely that the assembly reaction worked properly, producing recombinant nucleic acids. Simply monitoring double-strand DNA specific dye incorporation in a PCR/LCR rescue reaction provides at least a first approximation of the efficiency of the fragmentation and reassembly process.

Please replace the paragraph at page 125, lines 3-10 with the following amended paragraph:

Cells containing shuffled or mutated genes can express a protein or pathway capable of providing a ~~florescent~~ fluorescent signal directly. In such a case, the cell supplies the translation and, optionally, the transcriptional machinery, and required substrates are loaded by incubating cells in a mixture appropriate for delivering the substrate through the cell wall. Cells expressing either marker or library genes of interest are sorted and arrayed or collected on the basis of the emitted fluorescence signal. Such a signal may also derive from the scattering, or direct emission or absorbance of visible light from the individual cells.